

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Ashutosh PANDE; Lionel J. GARIN;
Kanwar CHADHA; Gregory B. TURETZKY

Serial No: Not Assigned [parent 09/781,068]

Filed: February 5, 2002

For: MULTI-MODE GLOBAL
POSITIONING SYSTEM FOR USE
WITH WIRELESS NETWORKS

Art Unit: Not Assigned

Examiner: Not Assigned

PRELIMINARY AMENDMENT

U. S. Patent and Trademark Office
P. O. Box 2327
Arlington, VA 22202

Dear Sir:

Prior to a First Office Action, please cancel claims 1 in the parent application
and add new claims 21-40 as follows:

IN THE CLAIMS:

21. (NEW) A geolocation system, comprising:

a geolocation server; and

a wireless communications device comprising a GPS receiver section,

wherein the GPS receiver section can be selectively switched between a first mode and
at least one other mode for determining a geolocation of the wireless communications
device, wherein the first mode and the at least one other mode are selected from a
group comprising a standalone mode, an autonomous mode, a network aided mode,
and a network centric mode, and the wireless communications device can selectively

send the determined geolocation of the wireless communications device to the geolocation server.

22. (NEW) The geolocation system of claim 21, wherein the GPS receiver switches between the standalone mode and the at least one other mode when a predetermined event occurs.

23. (NEW) The geolocation system of claim 22, wherein the predetermined event occurs within a thirty second time window centered on a time of determination of the geolocation of the wireless device.

24. (NEW) The geolocation system of claim 23, wherein the selective switching of the GPS receiver is performed automatically by the wireless communications device.

25. (NEW) The geolocation system of claim 23, wherein the selective switching of the GPS receiver is performed manually at the wireless communications device.

26. (NEW) The geolocation system of claim 23, wherein the selective sending of the determined geolocation of the wireless communications device is performed automatically by the wireless communications device.

27. (NEW) The geolocation system of claim 23, wherein the selective sending of the determined geolocation of the wireless communications device is performed manually at the wireless communications device.

28. (NEW) The geolocation system of claim 22, wherein the predetermined event is manually selected by a user.

29. (NEW) The geolocation system of claim 22, wherein the predetermined event is initial acquisition of at least one GPS^x satellite signal.
30. (NEW) The geolocation system of claim 29, wherein the selective switching of the GPS receiver switches the receiver from the at least one other mode to standalone mode.
31. (NEW) The geolocation system of claim 30, wherein the at least one other mode is the network aided mode.
32. (NEW) The geolocation system of claim 31, wherein the at least one other mode further comprises a reverse aiding mode.
33. (NEW) The geolocation system of claim 32, wherein the wireless communications device can receive information from a second source.
34. (NEW) The geolocation system of claim 33, wherein the second source of information is selected from a group comprising a bluetooth network, a Specialized Mobile Radio network, a Personal Communication System (PCS) network, a wireless Local Area Network, an infrared network, a paging network, a two-way paging network, or an FM broadcast network.
35. (NEW) The geolocation system of claim 34, wherein the geolocation of the wireless communication device is determined using GPS satellite signals and the second source of information.
36. (NEW) The geolocation system of claim 22, wherein the wireless communications device selectively displays the determined geolocation of the wireless communications device.

37. (NEW) A method for determining the geoposition of a mobile device, comprising:

receiving at least one signal from at least one GPS satellite at the mobile device, wherein the mobile device can be selectively switched into a mode selected from a group comprising a first mode and at least one other mode, wherein the first mode and the at least one other mode are selected from a group comprising a standalone mode, an autonomous mode, a network aided mode, and a network centric mode;

determining the geolocation of the mobile device wherein the geolocation is determined using the selected mode, and wherein the determination of the geolocation occurs within a predetermined time period from the switching of the mobile device into the selected mode; and

selectively sending the determined geolocation of the mobile device to a geolocation server via a wireless network.

38. (NEW) The method of claim 37, wherein the determining of the geolocation is performed by the mobile device.

39. (NEW) The method of claim 38, wherein the selective sending of the geolocation is performed by the mobile device, and the geolocation is sent from the mobile device to the geolocation server.

40. (NEW) A wireless communications device, comprising:
a call processing section for communicating with a wireless communications network; and

a GPS receiver section, wherein the GPS receiver section can be selectively switched between a first mode and at least one other mode for determining a geolocation of the wireless communications device, wherein the first mode and the at least one other mode are selected from a group comprising a standalone mode, an autonomous mode, and a network aided mode, and wherein the selective switching occurs within a predetermined time period from the determination of the geolocation of the wireless communications device, and the wireless communications device can selectively send the determined geolocation of the wireless communications device to the call processing section for transmission over the wireless communications network.

REMARKS

Prior to a First Office Action in this application, Applicants respectfully request that original claims 1-20 be canceled and new claims 21-40 be added. These amendments and new claims do not involve any new matter or objectionable changes. When the Examiner takes this application up for action, she is requested to take the foregoing into account.

The Seiple reference, U.S. Patent No. 6,222,484, discloses a personal emergency location system (PELS) comprising a small battery powered personal unit adapted to be worn by a person who may have fallen overboard from a vessel. The PELS has a GPS receiver and processor for determining the person's GPS location coordinates, and an RF transmitter for sending an RF emergency signal of the person's coordinate data to a nearby vessel (such as the person's vessel) within a short range. The PELS personal unit is updated with the most current ephemeris data during a time when the person is inactive on-board the vessel by plugging the PELS personal unit into an input module connected with the vessel's GPS system. If the person falls overboard, the PELS personal unit is activated to send an emergency signal with the person's location coordinates. See Col. 2, lines 36-51.

The PELS unit can also be plugged into a "night stand" when the user is asleep. The "night stand" connects the PELS unit to the on-board GPS system, updates almanac and current ephemeris data, and performs functional tests. The "night stand" also recharges the PELS batteries and updates the GPS receiver with ephemeris, almanac, position, and time data on a daily basis. See Col. 8, lines 50-57.

The present invention is distinguished from the Seiple reference in a fundamental respect: the Seiple reference requires the night stand to be connected to a GPS receiver to update the PELS (mobile) unit with current ephemeris, almanac, position, and time data. The present invention does not have such a requirement. Further, the Seiple reference does not switch between modes within a predetermined time period as in the present invention.

These differences result in operational advantages, which are also not suggested or taught in the Seiple reference. For example, the mobile unit of the present invention can now be used with various different base stations or systems, whereas the Seiple reference is confined to a single PELS/night stand recharger system, and hence is not flexible enough to move from a system designed by one manufacturer to a system designed by another.

It is submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe that there are matters relating to this continuation application remaining that can be resolved in a telephone interview, the Examiner is urged to call the Applicants' undersigned attorney.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles telephone number (213) 337-6742 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please
charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,

HOGAN & HARTSON L.L.P.

Date: February 5, 2002

By: 

Anthony J. Orler
Registration No. 41,232
Attorney for Applicant(s)

Biltmore Tower
500 South Grand Avenue, Suite 1900
Los Angeles, CA 90071
Telephone: (213) 337-6700
Facsimile: (213) 337-6701